

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Organic Full Spectrum CBG + CBD Tincture - Mint  
**PRODUCT STRENGTH:** 450mg CBG + 450mg CBD  
**TINCTURE BATCH:** 230130B  
**BEST BY DATE:** 1/30/2025  
**HEMP EXTRACT LOT:** BH-8672-24

### Physical Attributes

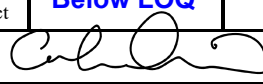
Test	Method	Specification	Results
Color	Internal	Golden to Amber	PASS
Odor	Internal	Characteristic - Olive and Hemp, Tropical	PASS
Appearance	Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

### Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
<b>Potency - Total CBD</b>	HPLC-UV DAD	450mg product strength mg / bottle	<b>471mg</b>	PASS
<b>Potency - Total CBG</b>	HPLC-UV DAD	450mg product strength mg / bottle	<b>476mg</b>	PASS
<b>Expanded Pesticide Panel</b>	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS
<b>Microbial</b> Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram***	<b>Absent</b>	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</b>	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Coliforms	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Aerobic Count	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>3</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Heavy Metals</b>	ICP-MS	Arsenic (As): ≤1.5 ppm† Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	<b>Below LOQ</b>	PASS
<b>Mycotoxins</b>	ICP-MS	Total Aflatoxins <20 ppb†† Aflatoxin B1 < 5 ppb Ochratoxin < 5 ppb	<b>Below LOQ</b>	PASS
<b>Residual Solvents</b>	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS

\*Only applies to products with labels claiming certified organic  
 \*\*Level of Quantification  
 \*\*\*Colony Forming Units per Gram  
 † Parts Per Million †† Part Per Billion  
 Values expressed in scientific notation.  
 Examples:  
 10<sup>2</sup>=100  
 10<sup>3</sup>=1,000

Quality Certified

  
 \_\_\_\_\_  
 Name

2/21/2023

Date

### 400mg CBD: 400mg CBG Tincture

Batch ID or Lot Number: <b>230103B</b>	Test: <b>Potency</b>	Reported: <b>09Sep2022</b>	USDA License: N/A
Matrix: Concentrate	Test ID: T000220549	Started: 07Sep2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 07Sep2022	Status: Active

### Cannabinoids

	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.018	0.053	0.090	0.90	
Cannabichromenic Acid (CBCA)	0.016	0.049	ND	ND	
Cannabidiol (CBD)	0.051	0.142	1.656	16.56	
Cannabidiolic Acid (CBDA)	0.052	0.145	ND	ND	
Cannabidivarin (CBDV)	0.012	0.033	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.022	0.061	ND	ND	
Cannabigerol (CBG)	0.010	0.030	1.673	16.73	
Cannabigerolic Acid (CBGA)	0.042	0.126	ND	ND	
Cannabinol (CBN)	0.013	0.039	ND	ND	
Cannabinolic Acid (CBNA)	0.028	0.086	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.049	0.151	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.045	0.137	0.068	0.68	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.040	0.121	ND	ND	
Tetrahydrocannabivarin (THCV)	0.009	0.027	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.035	0.107	ND	ND	
<b>Total Cannabinoids</b>			<b>3.487</b>	<b>34.87</b>	
Total Potential THC			0.068	0.68	
Total Potential CBD			1.656	16.56	

### Final Approval



Karen Winternheimer  
09Sep2022  
02:31:00 PM MDT

PREPARED BY / DATE



Jacob Miller  
09Sep2022  
02:44:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/54c8b603-4a45-45ad-89bc-03bfe534d592>

**Definitions**  
% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method).  
Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa \*(0.877)) and Total CBD = CBD + (CBDA \*(0.877)).

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02


CDPHE Certified  
54c8b603a4545ad89bc03bfe534d592.1


**400mg CBD: 400mg CBG Tincture**

Batch ID or Lot Number: <b>230130B</b>	Test: <b>Residual Solvents</b>	Reported: <b>10/7/22</b>	
Matrix: N/A	Test ID: T000223742	Started: 10/7/22	USDA License: N/A
Status: Active	Methods: TM04 (GC-MS): Residual Solvents	Received: 10/06/2022 @ 09:02 AM	Sampler ID: N/A

**RESIDUAL SOLVENTS DETERMINATION**

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
<b>Propane</b>	96 - 1917	*ND	
<b>Butanes</b> (Isobutane, n-Butane)	201 - 4013	*ND	
<b>Methanol</b>	68 - 1368	*ND	
<b>Pentane</b>	106 - 2127	*ND	
<b>Ethanol</b>	106 - 2126	*ND	
<b>Acetone</b>	108 - 2162	*ND	
<b>Isopropyl Alcohol</b>	111 - 2221	*ND	
<b>Hexane</b>	6 - 130	*ND	
<b>Ethyl Acetate</b>	107 - 2141	*ND	
<b>Benzene</b>	0.2 - 4.4	*ND	
<b>Heptanes</b>	111 - 2223	*ND	
<b>Toluene</b>	20 - 395	*ND	
<b>Xylenes</b> (m,p,o-Xylenes)	145 - 2895	*ND	


 Sam Smith  
 7-Oct-22  
 3:52 PM


 Karen Winternheimer  
 7-Oct-22  
 3:56 PM

PREPARED BY / DATE

APPROVED BY / DATE

**Definitions**

\* ND = None Detected (Defined by Dynamic Range of the method)

Testing results are based solely upon the sample submitted to SC Laboratories, Inc. SC Laboratories, Inc warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. All decision rulings are in accordance with the MED and results uploaded to METRC. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited A2LA Certificate Number 4329.01



Certificate #4329.02

**400mg CBD: 400mg CBG Tincture**

Batch ID or Lot Number: **230130B**      Test: **Pesticides**      Reported: **10/9/22**

Matrix: Concentrate      Test ID: T000223739      Started: 10/7/22      USDA License: N/A

Status: N/A      Method: TM17(LC-QQQ LC MS/MS):      Received: 10/06/2022 @ 09:02 AM      Sampler ID: N/A

**PESTICIDE DETERMINATION**

Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)
Acephate	40	ND	Fenoxycarb	50	ND	Paclobutrazol	47	ND
Acetamiprid	42	ND	Fipronil	73	ND	Permethrin	308	ND
Abamectin	343	ND	Flonicamid	53	ND	Phosmet	48	ND
Azoxystrobin	50	ND	Fludioxonil	293	ND	Prophos	280	ND
Bifenazate	46	ND	Hexythiazox	42	ND	Propoxur	44	ND
Boscalid	47	ND	Imazalil	248	ND	Pyridaben	287	ND
Carbaryl	41	ND	Imidacloprid	51	ND	Spinosad A	43	ND
Carbofuran	44	ND	Kresoxim-methyl	150	ND	Spinosad D	51	ND
Chlorantraniliprole	47	ND	Malathion	287	ND	Spiromesifen	249	ND
Chlorpyrifos	500	ND	Metalaxyl	44	ND	Spirotetramat	296	ND
Clofentezine	310	ND	Methiocarb	41	ND	Spiroxamine 1	17	ND
Diazinon	293	ND	Methomyl	37	ND	Spiroxamine 2	23	ND
Dichlorvos	273	ND	MGK 264 1	194	ND	Tebuconazole	292	ND
Dimethoate	41	ND	MGK 264 2	118	ND	Thiacloprid	42	ND
E-Fenpyroximate	288	ND	Myclobutanil	47	ND	Thiamethoxam	41	ND
Etofenprox	49	ND	Naled	55	ND	Trifloxystrobin	53	ND
Etoxazole	291	ND	Oxamyl	1500	ND			

*Samantha Smith*      Sam Smith  
10/9/2022  
7:15:00 PM

*K Winterheimer*      Karen Winterheimer  
10/9/2022  
7:19:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

**Definitions**

LOQ = Limit of Quantification  
ppb = Parts per Billion

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Certificate #4329.02

400mg CBD: 400mg CBG Tincture

Batch ID or Lot Number: <b>230130B</b>	Test: <b>Mycotoxins</b>	Reported: <b>10/21/22</b>	
Matrix: Concentrate	Test ID: T000223743	Started: 10/19/22	USDA License: N/A
Status: Active	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins	Received: 10/06/2022 @ 09:02 AM	Sampler ID: N/A

## MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	1.4 - 132.1	ND	N/A
Aflatoxin B1	1 - 33.7	ND	
Aflatoxin B2	2.6 - 33.1	ND	
Aflatoxin G1	1.1 - 33.4	ND	
Aflatoxin G2	1.3 - 33.2	ND	
<b>Total Aflatoxins (B1, B2, G1, and G2)</b>		ND	

*Samantha Smith*  
Sam Smith  
21-Oct-22  
10:29 AM

PREPARED BY / DATE

*K Winterheimer*  
Karen Winterheimer  
21-Oct-22  
10:31 AM

APPROVED BY / DATE

### Definitions

ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4329.02

**400mg CBD: 400mg CBG Tincture**


Batch ID or Lot Number: <b>230130B</b>	Test: <b>Metals</b>	Reported: <b>10/10/22</b>	
Matrix: Concentrate Co	Test ID: T000223741	Started: 10/10/22	USDA License: N/A
Status: Active	Method: TM19 (ICP-MS): Heavy Metals	Received: 10/06/2022 @ 09:02 AM	Sampler ID: N/A

**HEAVY METALS DETERMINATION**

Compound	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.043 - 4.29	ND	
Cadmium	0.046 - 4.58	ND	
Mercury	0.046 - 4.60	ND	
Lead	0.043 - 4.30	ND	


 Sam Smith  
 10-Oct-22  
 4:45 PM

PREPARED BY / DATE


 Karen Winterheimer  
 10-Oct-22  
 4:52 PM

APPROVED BY / DATE

**Definitions**

ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4329.02

## 400mg CBD: 400mg CBG Tincture

Batch ID or Lot Number: <b>230130B</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>12Sep2022</b>	USDA License: N/A
Matrix: Finished Product	Test ID: T000220763	Started: 08Sep2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 07Sep2022	Status: Active

### Microbial Contaminants

Contaminants	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 <sup>2</sup> CFU/g	1.0x10 <sup>3</sup> - 1.5x10 <sup>5</sup>	None Detected	
Total Coliforms*	TM27: Culture Plating	10 <sup>1</sup> CFU/g	1.0x10 <sup>2</sup> - 1.5x10 <sup>4</sup>	None Detected	

### Final Approval



Brianne Maillot  
11Sep2022  
04:02:00 PM MDT



Brett Hudson  
12Sep2022  
09:52:00 AM MDT



PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/8b4c1c59-026b-4d58-b8d4-e71dff5e3aa2>

#### Definitions

\* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 100,000 CFU  
CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection  
ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation  
STEC = Shiga Toxin-Producing E. coli

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Cert #4329.02

CDPHE Certified

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